#7



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/045,574A

DATE: 01/29/2003

TIME: 08:28:30

160

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01292003\J045574A.raw

```
4 <110> APPLICANT: MACKAY, Fabienne
        KALLED, Susan
 8 <120> TITLE OF INVENTION: BAFF, Inhibitors Thereof and Their Use
       in the Modulation of B-Cell Response and Treatment of
9
        Autoimmune Disorders
12 <130> FILE REFERENCE: 08201.0024-01000
14 <140> CURRENT APPLICATION NUMBER: 10/045,574A
15 <141> CURRENT FILING DATE: 2001-11-07
17 <150> PRIOR APPLICATION NUMBER: 60/117,169
18 <151> PRIOR FILING DATE: 1999-01-25
20 <150> PRIOR APPLICATION NUMBER: 60/143,228
                                                          ENTERED
21 <151> PRIOR FILING DATE: 1999-07-09
23 <150> PRIOR APPLICATION NUMBER: PCT/US00/01788
24 <151> PRIOR FILING DATE: 2000-01-25
26 <150> PRIOR APPLICATION NUMBER: 09/911,777
27 <151> PRIOR FILING DATE: 2001-07-24
29 <160> NUMBER OF SEQ ID NOS: 22
31 <170> SOFTWARE: FastSEQ for Windows Version 4.0
33 <210> SEQ ID NO: 1
34 <211> LENGTH: 218
35 <212> TYPE: PRT
36 <213> ORGANISM: Homo Sapien
38 <400> SEQUENCE: 1
39 Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu
                  5
                                      10
41 Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro
                                  25
43 Arg Lys Glu Ser Pro Ser Val Leu Leu Ser Cys Cys Leu Thr Val Val
                              40
45_Ser_Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg
                                  -----
                          `5̄5 `
47 Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Lys
                      70
                                          75
49 Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn Ser
                                      90
51 Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln Asp
              100
                                  105
53 Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys Gly
                              120
          115
55 Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala
                         135
                                             140
57 Leu Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met Gly His
```

155

150

58 145

RAW SEQUENCE LISTING DATE: 01/29/2003 PATENT APPLICATION: US/10/045,574A TIME: 08:28:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01292003\J045574A.raw

```
59 Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu
                                      170
                  165
61 Val Thr Leu Phe Arg Cys Ile Gln Asn Leu Glu Glu Gly Asp Glu Leu
              180
                                  185
63 Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu Asp Gly Asp
                               200 -
65 Val Thr Phe Phe Gly Ala Leu Lys Leu Leu
                          215
       210
67 <210> SEQ ID NO: 2
68 <211> LENGTH: 232
69 <212> TYPE: PRT
70 <213> ORGANISM: Murine
72 <400> SEQUENCE: 2
73 Met Asp Glu Ser Ala Lys Thr Leu Pro Pro Pro Cys Leu Cys Phe Cys
                   5
                                       10
75 Ser Glu Lys Gly Glu Asp Met Lys Val Gly Tyr Asp Pro Ile Thr Pro
77 Gln Lys Glu Glu Gly Ala Val Leu Leu Ser Ser Phe Thr Ala Met
79 Ser Leu Tyr Gln Leu Ala Ala Leu Gln Ala Asp Leu Met Asn Leu Arg
81 Met Glu Leu Gln Ser Tyr Arg Gly Ser Ala Thr Pro Ala Ala Ala Lys
                      70
                                          75
83 Leu Leu Thr Pro Ala Ala Pro Arg Pro His Asn Ser Ser Arg Gly His
                  85
                                       90
85 Arg Asn Arg Arg Ala Phe Pro Gly Pro Glu Glu Thr Glu Gln Asp Val
              100
                                  105
87 Asp Leu Ser Ala Pro Pro Ala Leu Arg Asn Ile Ile Gln Asp Cys Leu
   115
                              120
                                                   125
89 Gln Leu Ile Ala Asp Ser Asp Thr Pro Thr Ile Arg Lys Gly Thr Tyr
                          135
                                               140
91 Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Asn Ala Leu Tyr
                       150
                                           155
93 Ser Gln Val Leu Tyr Thr Asp Pro Ile Phe Ala Met Gly His Val Ile
                  165
                                       170
95 Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu Val Thr
              180
                                  185
97 Leu Phe Arg Cys Ile Gln Asn Leu Glu Glu Gly Asp Glu Ile Gln Leu
98 - - - 1.95 _ _ 200
                                                   205
99 Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr - - - -
      210
101 Phe Phe Gly Ala Leu Lys Leu Leu
102 225
                        230
103 <210> SEQ ID NO: 3
104 <211> LENGTH: 102
105 <212> TYPE: PRT
106 <213> ORGANISM: Homo Sapien
108 <400> SEQUENCE: 3
```

109 Val Thr Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr

RAW SEQUENCE LISTING DATE: 01/29/2003 PATENT APPLICATION: US/10/045,574A TIME: 08:28:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01292003\J045574A.raw

```
110 1
111 Ile Gln Lys Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys
                                   25
113 Arg Gly Ser Ala Leu Glu Glu Lys Tyr Gly Gln Val Leu Tyr Thr Asp
115 Lys Thr Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His Val
117 Phe Gly Asp Glu Leu Ser Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala
                       70
119 Lys Leu Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn
                   85
121 Ala Gln Ile Ser Leu Asp
               100
122
123 <210> SEQ ID NO: 4
124 <211> LENGTH: 96
125 <212> TYPE: PRT
126 <213> ORGANISM: Homo Sapien
128 <400> SEQUENCE: 4
129 Lys Gln His Ser Val Leu His Leu Val Pro Ile Asn Ala Thr Ser Lys
131 Asp Asp Ser Asp Val Thr Glu Val Met Trp Gln Pro Ala Leu Arg Arg
               20
                                   25
133 Gly Arg Gly Leu Gln Ala Gln Tyr Ser Gln Val Leu Phe Gln Asp Val
                               40
135 Thr Phe Thr Met Gly Gln Val Val Ser Arg Glu Gly Gln Gly Arg Ala
                           55
137 Tyr Asn Ser Cys Tyr Ser Ala Gly Val Phe His Leu His Gln Gly Asp
                       70
                                           75
139 Ile Leu Ser Val Ile Ile Pro Arg Ala Arg Ala Lys Leu Asn Leu Ser
                   85
141 <210> SEQ ID NO: 5
142 <211> LENGTH: 104
143 <212> TYPE: PRT
144 <213> ORGANISM: Homo Sapien
146 <400> SEQUENCE: 5
147 Ser Asp Lys Pro Val Ala His Val Val Ala Asn Pro Gln Ala Glu Gly
149 Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu Leu Ala Asn Gly
151 Val Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys Pro Ser Thr His
          35
                               40
153 Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val Ser Tyr Gln Thr
155 Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly
                                           75
157 Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg
159 Pro Asp Tyr Leu Asp Phe Ala Glu
               100
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/045,574A

DATE: 01/29/2003 TIME: 08:28:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01292003\J045574A.raw

```
161 <210> SEQ ID NO: 6
162 <211> LENGTH: 97
163 <212> TYPE: PRT
164 <213> ORGANISM: Homo Sapien
166 <400> SEQUENCE: 6
167 Glu Leu Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn Ser Arg Ser
169 Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu Leu Ser Gly
                                    25
171 Val Lys Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys Asn Asn Leu
                                40
173 Pro Leu Ser His Lys Val Tyr Met Arg Asn Ser Lys Tyr Pro Gln Met
                           55
175 Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn Leu Thr Ser Ala
                      70
                                            75
177 Asp His Leu Tyr Val Asn Val Ser Glu Leu Ser Leu Val Asn Phe Glu
178
179 Glu
181 <210> SEQ ID NO: 7
182 <211> LENGTH: 102
183 <212> TYPE: PRT
184 <213> ORGANISM: Homo Sapien
186 <400> SEQUENCE: 7
187 Thr Leu Lys Pro Ala Ala His Leu Ile Gly Asp Pro Ser Lys Gln Asn
                   5
189 Ser Leu Leu Trp Arg Ala Asn Thr Asp Arg Ala Phe Leu Gln Asp Gly
191 Phe Tyr Ser Gln Val Val Phe Ser Gly Lys Ala Tyr Ser Pro Lys Ala
192 35
193 Thr Ser Ser Pro Leu Tyr Leu Ala His Glu Val Gln Leu Phe Ser Ser
                           55
195 Gln Tyr Pro Phe Pro Trp Leu His Ser Met Tyr His Gly Ala Ala Phe
                       70
197 Gln Leu Thr Gln Gly Asp Gln Leu Ser Thr His Thr Asp Gly Ile Pro
                   85
199 His Leu Val Leu Ser Phe
200
               100
201 <210> SEQ ID NO: 8
202 <211> LENGTH: 109
203 <212> TYPE: PRT
204 <213> ORGANISM: Homo Sapien
206 <400> SEQUENCE: 8
207 Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Thr Asp Ile Pro
                    5
                                        10
209 Ser Gly Ser His Lys Val Ser Leu Ser Ser Trp Tyr His Asp Arg Gly
                                   25
211 Trp Gly Lys Ile Ser Asn Met Tyr Ala Asn Ile Cys Phe Arg His His
```

213 Glu Thr Ser Gly Asp Leu Ala Thr Glu Tyr Leu Gln Leu Met Val Tyr

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/045,574A

DATE: 01/29/2003 TIME: 08:28:30

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01292003\J045574A.raw

214 50	55		60		
215 Val Thr Lys Thr Ser Ile		o Ser Glu		he Tyr	Ser
216 65 70	-	75		-	80
217 Ile Asn Val Gly Gly Phe	Phe Lys Le	u Arg Ser	Gly Glu G	Slu Ile	Ser
218 85		90		95	
219 Ile Glu Val Ser Asn Pro	Ser Leu Le	u Asp Pro	Asp Gln		
220 100	10	5			
221 <210> SEQ ID NO: 9					
222 <211> LENGTH: 26					
223 <212> TYPE: DNA					
224 <213> ORGANISM: Homo Sag	pien				
226 <400> SEQUENCE: 9					
227 actgtttctt ctggaccctg aa	acggc				26
229 <210> SEQ ID NO: 10					
230 <211> LENGTH: 30					
231 <212> TYPE: DNA					
232 <213> ORGANISM: Homo Sag	pien				
234 <400> SEQUENCE: 10					
235 gacaagettg ccaccatgga to	gactccaca				30
237 <210> SEQ ID NO: 11					
238 <211> LENGTH: 23					
239 <212> TYPE: DNA					
240 <213> ORGANISM: Homo Sap	pien				
242 <400> SEQUENCE: 11	~~				23
243 actagtcaca gcagtttcaa to 245 <210> SEQ ID NO: 12	ge.				23
246 <211> LENGTH: 22 247 <212> TYPE: DNA					
248 <213> ORGANISM: Homo Sag	nien				
250 <400> SEQUENCE: 12	prem				
251 ctgcagggtc cagaagaaac ag	۳				22
253 <210> SEQ ID NO: 13	9				22
254 <211> LENGTH: 24					
255 <212> TYPE: DNA					
256 <213> ORGANISM: Homo Sag	oien				
258 <400> SEQUENCE: 13	•				
259 ggagaaggca actccagtca ga	aac				24
261 <210> SEQ ID NO: 14					
262 <211> LENGTH: 24		_			
263 <212> TYPE: DNA					
264 <213> ORGANISM: Homo Sag	pien				
266 <400> SEQUENCE: 14					
267 caattcatcc ccaaagacat go	gac				24
269 <210> SEQ ID NO: 15					
270 <211> LENGTH: 22					
271 <212> TYPE: DNA					
272 <213> ORGANISM: Homo Sag	oien				
274 <400> SEQUENCE: 15					
275 teggaacaca aegaaacaag te					22

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/045,574A

DATE: 01/29/2003

TIME: 08:28:31

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\01292003\J045574A.raw